1: Burrows--64 (1947-48) Woleaians
116, 487, 502 Ifalik

"The ancient art of navigation in native sailing canoes is still in use on the seas about Ifalik. Most of the voyages are short, between neighboring islands. Probably more than half of the traffic in and out of Ifalik is with Woleai, only 30 miles away. Yet trips to any of the islands within 100 miles are not unusual. And though longer distances, as to Yap, Truk and Guam, are now ordinarily left to foreign steamers or airplanes, sailing directions for them, too, are still remembered. Tom, whose claim to be the foremost 'captain' of Ifalik seemed to be generally acknowledged, said that he could still reach any of those islands by the old methods. However, he owns two compasses, and knows how to use them from his long service on foreign ships. He would supplement native lore by taking one along."

(1947-48)

"Detailed Sailing Directions

The following directions include, besides guiding stars, some further directions: a rear sight on Ifalik while it remains above the horizon; choice of guiding stars according to the current; and directions for recovering a destination which has been misled. In naming the stars in these more detailed directions, Tom omitted the prefixes tagali-or tubwuli-for rising or setting, and his example has been followed.

Ifalik to Woleai and Return

Guiding Stars-Ulu, a little north of west. If current is flowing north, Mailap, due west; if it is flowing south, between Ulu and Mwarigari.

Rear Sight- Keep Matolo, the channel between Falārik and Falālap, 'open'; that is, visible throughout its length. Keep the islet Ellā in such a position that 'two fathoms' of Falālap are visible to the south of it.

Birds- If the navigator drifts off his course and 'goes to Mailap' instead of to Ulu, passing south of Woleai, he will see two small black and red birds (gerap). He must 'leave them to the south'; that is, turn north from where he sees them.

If the canoe drifts north, and goes to Mwarigari instead of Ulu, two white sea birds (paiennai, bigger than a fairy tern) will be seen. They must be 'left on the south.' Woleai will not be far, but it will be necessary to have a lookout climb the mast in order to see it.

If the canoe continues on a course too far to the north, after leaving the paiennai birds, a shark will be seen of the kind called malrang, of the bright red color of turmeric face-paint. Then it will be necessary to take a course a little east of south ('east half south', Tom called it). [83]

Stars for Return Trip-The star indicating the true direction is Elieli. If the current flows north, take a course between Elieli and Mailap; if it flows south, between Elieli and Sarabwol."

1: Burrows--136
116, 565, 576, 487

(1947-48)

Woleaians
Ifalik

"Commoners are required to acknowledge their subordination to chiefly authority by stooping as they pass in front of the men's house. The main path along the lagoon shore of Falārĭk island passes immediately in front of the men's house; but this part of it is not often used. Unless they have business there, commoners detour to shoreward. This roundabout way is noticeably more worn by passing feet than the direct one. Even at this distance, they bend low as they pass, usually with hands clasped behind their backs, like a miner stooping as he walks through a low gallery. This deferential gesture, though rather carefully observed most of the time, is sometimes forgotten or ignored. Children who hold their heads high in passing Katēlū may be rebuked by their elders. One adult who failed to stoop, and was seen by the chief WolpaitIk from the nearby canoe-house, was sharply reprimanded."

1: Burrows--235-243 (1947-48) Woleaians 1-13
116, 487, 502 Ifalik

"Appendix II. Further Sailing Directions.

A. Ifalik to Faraulep & Return

Guiding Stars - Wolwol, due north, indicates the true direction. But because of prevailing currents, take first Tagalemailepalevang (on the chart as (Tagali) Mailapelivang) for 4 miles; then Tubwulemailepalevang for 1 mile; then Wolwol. After following Wolwol for 1 1/2 miles, Faraulep should be sighted.

Rear Sight - Keep Ella just touching the northwestern tip of Falārik.

Bird - If a metalipangerāle, with long tail feathers, is sighted, the canoe is off its course. Then the star Ulu (whether rising or setting not stated) will bring it in to Faraulep.

Fish - If a shark is sighted, follow the star Metremeiat.

Stars for Return Trip - The star indicating the true direction is Wolwol. To allow for currents, take first Metremeiat for 4 miles; then Metremeital for 1 mile. From there, Wolwol will fetch Ifalik.

B. Guiding Stars, Faiau to Ifalik.

Metremeital for 5 miles; then Tubwulemetara (on chart as (Tubwu li) Metarua) for 2 miles; then Tubwul'Ipu for 2 miles. This will bring the canoe in sight of Ifalik.

C. Rear Sights for Voyage from Ifalik to Lamotrek.

Put Ella just touching the end of the long stone pier on Falālap.
On the return trip, put the islet Falaite just touching the north end of Valipi.

D. Courses from Yap to Ifalik, with Intermediate Stops

First course: 1. Yap to Ulithi; guiding star, Tagal'ulu.
2. Ulithi to Fais; Tagalielieli.
3. Fais to Woleai; Tagatumūra.
4. Woleai to Ifalik; Tagalielieli.

Second Course: 1. Yap to Sorol, Tagalielieli.
2. Sorol to Woleai; Tagalielieli.
3. Woleai to Ifalik; Tagalielieli.

Third Course: 1. Yap to Sorol; Tagalielieli.
2. Sorol to Eaurupik; Tagatumūra.
3. Eaurupik to Woleai; Tagalimēl.

To sail from Ifalik to Yap, the preferred course is by way of Woleai and Sorol. The star Tubwul'ūlu is followed the whole way.

E. Courses from Truk to Ifalik. [236]

First Course: 1. Truk to Satawan, Tubwulimailap.
2. Satawan to Ifalik, Tubwulimailap.

Second Course (recommended because gaps are shorter):
1. Truk to Puluwat; Tubwul'ūlu; (2 nights).

2. Puluwat to Satawan; Tubwulielieli; (1 night).
3. Satawan to Lamotrek; Tubwul'ūlu (1 night).
4. Lamotrek to Elato; Tubwul'ūlu (1/2 day; these islands are in sight of each other.)
5. Elato to Ifalik; Tubwulielieli; (1 night).

F. Courses from Ifalik to Truk.

First Course: Ifalik to Satawan, Satawan to Truk; Tagalimailap the whole way.
Second Course (recommended because distances are shorter).

1. Ifalik to Elato; Tagal'ulu.
2. Elato to Lamotrek; by day, in sight; by night, Tagalielieli.
3. Lamotrek to Satawan; Tagalielieli.
4. Puluwat to Souk; Wolwol. (Why this detour to the south?)
5. Souk to Truk; Tagal'ūlu. [237]

G. From Woleai.

Tagaliwileugo - Faraulep.
Tagalimailap - Vasulos (reef).
Tagalielieli - Ifalik.
Tagalitumūr - Moroe (reef).
Tubwulitumūr - Aurupik.

Tubwusarabwol-Bugueluelu arem (reef). On the way, one man o' war bird.

Tubwulūlu-Sorol.

Tubwulimwarigari-Ulithi.

Tubwulimēl-Fais. (One of the Ifalik dance songs, the Peiran of Falālap, disagrees. According to its text, the star Tubwulimwarigari will bring a canoe from Woleai to the rock Rimwelivarougoue in Fais.)

H. From Faraulep.

Tagalimailap e li vang -Saipan.

Tagaliwileugo - 1 fish, gapile.

Tagaliugilik - 1 big fish - seu etag.

Tagalimēl - Faiau.

Pauievang - Kalūa (small reef).

Tagalimailap - Religousām - (reef).

Tagalielieli - one man o' war bird, (called in 'captain's language' neurevas.)

Tagatumūr - Trimaliwelibwugu (reef); farther, Olimarao.

Tagalipu - 2 whales, ualeliga jewetoxu.

Metremeiat - Vasulos (reef).
Wolwol li Iaūru - Ifalik. [238]
Tubwul'Ipu - Woleai.
Metārua - 20 porpoises, guatrIk.
Tubwulielieli - 1 bird with long tail-feathers, metalipangerele; Sorol.
Tubwulimailap - 1 whale, ualimen.
Tubwul'ūlu - 1 red fish, ig i seram; Fais.
Tubwuwileugo - 1 shark, trImeijou, with 2 small fish, sIleIīa, ' under his arm'; 2 big black diving birds, igotōro.
Wolwol li Ievang--many small black birds, asuval; Guam.

I. From Faiau.

Tagalimailap e li vang - Trilial (tinian).
Tagaliwileugo - Saipan.
Tagalimēl - Tipipi (uninhabited island).
Tagal ' ūl - Tipapa (uninhabited island).
Tagalimailap - Getūa.
Tagalipauiaūru - 1 shark, laigelalo; his head keeps coming out of water.
Tagalielieli - Pigēla (uninhabited island).

Tagatumūra - Satawan.
Taga limetārua - Lamotrek.
Tagal'Īpu - Elato.
Metremeiat - 1 shark, with 1 man-o'-war bird over him, saumātol.
Wolwol li Iaūru - Olimarao.
Metremeital - 4 whales, nāgmetau.
Tubwulīpu - Vasulos (reef).
Tubwulimetārua (? designation undertain) - Ifalik
Tubwulitumūra - Faraulep.
Tubwulielieli - 1 shark with 2 small fish 'under his arm' - shemeijo.
Tubwulimailap - Fais.
Tubwul'ūl - 1 large fish with black head and white tail, tagural.[239]
Tubwulimēl - Vasielus (reef).
Tubwuwileugo - 1 white man-o'- war bird, gapilē.
Wolwol li Ievang - Guam

J. From Lamotrek.

Tagaliwileugo - 10 small fish, linked together like a chain - fātaleimware.
Tagaliugilīk - Pigello (small uninhabited island, many turtles - Pikelot?)

Tagalimēl - Uraiseivetāl (small reef).
Tagal 'ūlu - Pigennot (small uninhabited island, many turtles - Pikelot?)
Tagalipquievang - 20 big porpoises; very bad, will try to crush canoe.
Tagalimailap - Puluwat.
Tagalielieli - Satawan.
Tagal'Īpu - many birds, tepāl, with strong odor.
Mętręmeiat - 1 whale, uauumaiaūru.
Wolwol li Iaūru - 2 pagennai birds, called in captain's language lairomwara.
Tubwulipauiaūru - Ifalik
Tubwulimailap - Olimarao.
TubwuliugIlĪk - Faiau.
Tubwuliwileugo - Faurĕp (reef).
Tubwulimailapliievang - RütIk (reef).

K. From Olimarao. (Two versions were given of this. Intended to supplement each other, they disagreed at some points, as noted.)
Tagaliwileugo - many porpoises, called in captain's language naigām.

TagaliugIIĪk - black mwili birds, called in captain's language pongenor.
Tagalimēl - Tipapa.
Tagalimegarigari - (other version - many mweli birds, called pongulōr.) [240]
Tagal'ūlu - Pigella (uninhabited island).
Tagali pauievang - (other version - Pigella).
Tagalimailap - Pigennot.
Tagalielieli - Lamotrek.
Tagatumūra - Elato.
Tagalīpu - 2 paugennai birds, called aurovālu.
Wolwol li Ievang - 1 common shark and 2 very small white sharks called laorumetau.
Metremeital - MIsailealu (reef).
Tubwul'Ipu - Ororang (reef).
Tubwulitumūra - Weraitogelimware (reef).
Tubwulisarabwol - Ifalik (? one version dubious, as Aurupik is south of Ifalik.)
Tubwulielieli - Aurupik.
Tubwulipauiauru - Ifalik (? one version).

Tubwulimailap - Woleai; Vasulos, one version; other has next star south for Vasulos.
Tubwulipauievang - Gautā, (reef).
Tubwul'ūlu - many porpoises, called in one version Falepeipeilalai; in the other Misailiealu, which the other uses for a reef under Metremeital.
Tubwulimwarigari - 40 fish, arōng.
Tubwulimel - SImweliulibwugu (reef); farther on, Faraulep.
Tubwuliwileugo - many small porpoises, uouwelinIran
Tubwulimailipelivang - OratIk (reef), one version; other has Galuā, apparently a little farther sw, under a star for which no name is listed.
Wolwol li Ievang - Farāp (reef), 1 version; other has Rajeivetāl, and, farther on, Faiau.

L. From Satawal (Satawal-aito).

(This list as given contained only directions toward the east. Two for the nearer islands to the west, however, were given 'in reverse' with the list for those islands - Lamotrek and Faiau - and are added here.)
Tagatumūra - Orejeivetan (reef). [241]

Tagasarabwol - Souk (Pulusuk?).
Tagalielieli - Oroural (reef).
Tagal'ūlu - TruatalevalerIk (reef); farther on, under same star, Truataligapelalei (reef); still farther, under same star, Puluwat.
Tagal'ugIlĪk - Pënënnot (Pikelot? Recorded elsewhere as Pigënnot). From Pëgënnot, the star Tagalielieli will lead to the reef Autaxileor, thence to the reef Autailemetau, and thence to Bwënnap. From Pegënnot, Tagatumūra will lead to Puluwat. From Bwënnap, TubwulIpu will lead to Puluwat.

M. From Yap.

Tagaliwileugo - Gaverot, island; 'steamer and canoe come close, go down in water.' (The name is virtually the same as Gaferut, which is about n. n. e. (?) from Ifalik, but about e by s from Yap.
Tagalimegarigāri - Ulithi.
Tagalielieli - Sorol.
Tagal'Īpu - Tongelap (reef).
Wolwolliiaūru - Ngolu (Ngulu)

Tubwul'Ipu - Gologol (reef).
Tubwulitumūra - Palau.
Tubwulisarabwol - Olāt (long reef).
Tubwulimailap - Philippines.
Tubwulimēl - 1 shark, ugelingaj.
Tubwuwileugo - 1 fish, sōm, whose dorsal fin slants toward the head instead of toward the tail; also seaweed, lem.
Wolwol liievang - 1 whale, walimIl, with many white birds perching on it.

N. From Truk.

Tagaliwileugo - 1 big man-o'-war bird, arIgemoa.
Tagalimēl - Pish (inhabited island).
Tagal'ūlu - Tennōmar (sandy island, with low trees and many fish).

[242]

Tagalimailap - Falepei (Ponape).
Tagalipauiaūru - Losap.
Tagalielieli - Leme.
Tagatumūra - Gotū.
Tagalimetārua - Satawal-airek (called Satawan on our charts; the suffix distinguishes it from Satawal-aito farther

west, near Lamotrek, which is called Satawal on our charts.

TagalĪpu - Namoluk ('Mortlock', Tom explained).
Wolwolliievang - Pēlap ('much surf')
Metremeital - 1 whale, called uauemaiauru.
Tubwul'Īpu - Pijemware.
Tubwulimetārua - 1 fish, lāgvIt.
Tubwulitumūra - 1 big shark, Oleleimwal, will crush a canoe.
Tubwulielieli - Souk. (Pulusuk?).
Tubwulimailap - Puluwat.
Tubwul'ūlu - Tamtam.
Tubwulimēl - Bwennap
Tubwuliwileugo - Oloulo ('atoll, white men live there').
Tubwulimailap elivang - Faiau-aiat (East Fayu?).
Wolwol li Ievang - Namoin (Nomwin?).

O. From Guam.

Tagaliwileugo - Pāgang (Pagan?).
Tagalimēl - Songorol ('no more people').
Tagal'ūlu - Tipipi.
Tagalipauievang - Tipapa.

Tagalielieli - Saipan.*
Tagaliṣarabwol - Nuta (Rota?).*
Tagatumura - Trilial (Tinian?).*
Tagal'Īpu - Lamotrek.
Mẹtrẹmeiat - Elato. [243]
Wolwol liiauru - Faiau.
Tubwul'Īpu - Faraulep, Ifaluk
Tubwutumūra - Woleai
Tubwulielieli - Yap.
Tubwulimailap - Philippines.
Tubwuwileugo - 1 white man-o'war bird, called Vālemerizu.
Tubwulimailapelivang - Europe. "

"* These were given by points of the compass instead of stars. It seems likely that Tom said 'south' in these cases when he meant 'north'."

4: Krämer--126 (1909) 1937 Woleaians
116, 487, 103 Elato

Espinosa... was given a map on which all the islands and their population were marked; many of these islands were familiar to the captain [VMM: a navigator from Lamotrek). These were the islands:

1. Carao
2. Falopi
3. Ingerig
4. Oruzolua
5. Etat
6. Lamuluc
7. Luosap
8. Ohala, 1000 inhabitants
9. Olcul, 200 inhabitants
10. Ponlap, 100 inhabitants
11. Poloac, 600 inhabitants
12. Sove, 500 inhabitants
13. Pig
14. Piguela
15. Satavan, 400 inhabitants
16. Lamursee, 1400 inhabitants
17, Falive, 1000 inhabitants
18. Fayao
19. Farroilap, 100 inhabitants
20. Olio, 1000 inhabitants
21. Fais
22. Falalap
23. Mugemugs
24. Jap
25. Ngulue
26. Palao

4: Krämer--186 (1909) 1937 Woleaians
116, 137, 487 Woleai

Fialap is well covered with trees; paths cross the island in various directions.

4: Krämer--272 (1909) 1937 Woleaians
116, 487 Woleai

According to the native, Kadu, voyages were made from Ulea to Palau, Sonsoror, Pul, Merir and the return route was by way of Sorol (see Kotzebue, Entdeckungsreise ... Vol. III, page 104.).

41: Bates & Abbott N-5 (1953) 1958
OR21 Woleai OR21
Ifaluk

and then pace directly toward him. Don would sight on Tony (or me on arrival) to get the direction, and I would call back the paces so that Don could draw directly on the base map.

The main trail of Falarik, which I got in the habit of calling "the broad highway," or sometimes "el camino real," ran through the coconut grove parallel to the lagoon shore, generally twenty or thirty yards in from the water. It was about two yards wide, and neatly marked on each side by a row of moss-covered coral rocks. This broad highway ran between the Fan Nap and the lagoon, and passed directly in front of five of the big canoe houses that faced the lagoon along the Falarik shore. The sixth canoe house on Falarik was away from the trail on the point of land that jutted toward Falalap. There were also two canoe houses on Falalap, one facing the lagoon, and the other facing the pass between the two islands.

The canoe houses, clearly distinguishable on the aerial photographs, were convenient reference points in mapping. They served not only for the storage of canoes, nets, lines and other gear, but also as social centers for the men of the atoll. Groups gathered there to talk, or rest, or weave nets, or carry on the never-ending job of making twine or rope from sennit, coconut fiber. A big sea-going canoe was being built in the Falepenach canoe house, near the Fan Nap, during the summer of 1953. This provided me with a convenient and continuing subject for photography.

The broad highway ran for almost a mile along the lagoon shore of Falarik, extending considerably beyond the last habitation, toward the north end of the island, ending abruptly in the middle of nowhere. This northern tip of the island, beyond the end of the trail, was a wild tangle of vegetation, relatively little visited and little used. Except for this northwest tip, the whole of the lagoon margin of the island was a park-like coconut grove, kept clear of weeds or shrubs with almost no other kind of tree—only an occasional breadfruit tree near the household areas, and a few other things like the big *Barringtonia* by the Sabolap canoe house.

The entire course of the broad highway was thus through the open coconut grove. The habitations were mostly set at some distance back from the highway, near the "boondock line."

41: Bates & Abbott N-5 (1953) 1958
OR21 Woleai OR21
Ifaluk

590 844 until it is able to walk, but the adopting mother shares the care and affections from the beginning; and when the baby is able to walk, it moves officially into the household of the adopting parents.

593 597 The child thus really acquires an extra set of parents, since it continues all through life to have close association with its real parents as well as with its adopting parents. The child acquires extra sets of "brothers" and "sisters" as well. Don found some difficulty with the word "brother" in teaching English since, while the Ifalukians all knew who were blood brothers and who were not, the matter seemed of little importance to them.

Our friend Yani, for instance, and his wife, Letaweriur, had three children. His oldest had been adopted into his mother's household, Soumat, and his next into his father's household (since his father was a re-married widower with no children by the second wife). Only the youngest had he kept to himself. Yet Yani was with all of his children every day. In this case, Yani and his wife, although they officially belonged in her household, Falepenach, spent most of their time in the Soumat household, since it was less crowded. This sort of casualness gave us a great deal of trouble with that census.

126 133 489 But this is straying from the problem of trying to get the Falarik trails down on the base map. With the broad highway and the canoe houses as fixed points of reference, we started to map the principal trails across the island. Falarik was a crescent, following the curve of the circular atoll reef; it was a little over a mile long, with an average width of about 300 yards. There were a dozen or so trails across the island from the inhabited, lagoon side, to the outer, ocean side.

The first of these, taking off from the canoe house beside the Fan Nap, began as a "highway" rather than a "trail." Like the broad highway, it was a wide, straight path, marked on both sides by lines of moss-covered coral rocks. On the left side of this trail was the dense [1178] vegetation of Katelu, the sacred site of the ancient Men's House which was in use in the time of Maur, the island's "culture hero." This sacred spot was never entered by anyone except Maroligar, who was its official custodian. As a result, it was a wild tangle of natural vegetation. At one point on the path by Katelu was a large, fresh-water pool in [643] which Fagolier, the paramount chief, sometimes bathed. On the right

41: Bates & Abbott N-5 (1953) 1958
OR21 Woleai OR21
Ifaluk

side of the trail there was an open grove of high breadfruit trees and other plantings of the Falivelu household.

This trail by Katelu we called the "schoolhouse trail"—because it led directly to the schoolhouse. The schoolhouse was a thatched shed built in a large clearing exactly half way across the island. It had been put up in accordance with instructions, either from the Navy or the Trust Territory, and contained a blackboard and a supply of essential equipment like boxing gloves and basket balls. But how would one go about introducing schooling on Ifaluk? Or should one? The answer to this latter, surely, is "yes" because willy-nilly the Ifalukians must learn to deal with the outer world in these days when that world has become a small neighborhood, and even Ifaluk cannot be protected by its remoteness. But the question of how to introduce this schooling is a complex one for which perhaps no one has a clear answer.

At any rate, the schoolhouse was not used for educational purposes during the period of our stay, but it did have uses. The clearing was a handy place to locate the rain gauge, and the schoolhouse itself, with its open sides, seemed a good place for the regular measurements of shade temperature and humidity. So the area became our meteorological station.

On this south end of Falarik the coconut grove of the lagoon shore extended right around the tip of the island to the ocean side, enveloping the schoolhouse yard. The trail was straight and formal, however, only as far as the school; beyond it became a winding footpath leading through the coconuts to the ocean beach.

Except for this southern end and the long stretch of lagoon shore, Falarik was covered with boondocks. Coconuts grew all through these boondocks, and the principal forest tree was breadfruit. But there were a dozen other kinds of trees, and a thick underbrush of bushes and ferns—ferns everywhere. There were many swampy areas in the center of the island, but the land became slightly higher toward the ocean shore, the surface rough with coral boulders, culminating in a definite "boulder ridge" paralleling the ocean beach.

The beach on the ocean side was narrow, sloping rather steeply from this boulder ridge. Along most of the length of the island the beach, too, was covered with coral rocks, but there were also stretches of coral